REMARKS

In the Office Action mailed April 30, 2007, the Examiner took the following action: (1) rejected claims 3, 7, 8, 17-22, 27, 31, 32, 41-46, 51, 55, 56, and 65-70 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention; and (2) rejected claims 1, 2, 4-6, 9-16, 23-26, 28-30, 33-40, 47-50, 52-53, 57-64, and 71-72 under 35 USC §102(b) as being anticipated by Pado et al (U.S. 6,185,470). Applicants respectfully request reconsideration of the application in view of the foregoing amendments and the following remarks.

I. 35 U.S.C. §112, second paragraph

Claims 3, 7, 8, 17-22, 27, 31, 32, 41-46, 51, 55, 56, and 65-70 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have Ammended claims 3, 7, 8, 17-22, 27, 31, 32, 41-46, 51, 55, 56, and 65-70 so that these claims particulary point out and distinctly claim the subject matter which applicant regards as the invention. Accordingly, applicants respectfully request reconsideration and withdrawal of these rejections.

II. 35 USC § 102(b)

Claims 1, 23-25, 47-49, 71, and 72 recite in part:

> "tuning a cost function . . . comprising . . . iteratively applying a control input signal from a range of known signals, wherein the control input signal *is generated using a signal generator* . . ." (emphasis added).

Pado (U.S. 6,185,470):

As noted by the examiner, Pado at column 4, beginning at line 54 discloses a method in which a "system 10 receives sensor feedback y(n) from plant 12, digitizes it and then feeds it via line 32 into the inputs of neural network 18." However, Pado fails to teach or fairly suggest a method in which the system input comprises an input signal which "*is generated using a signal generator*" as recited in claims 1, 23-25, 47-49, and 72. (emphasis added). The use of a signal generator to generate inputs for a neural network avoids the risk of damage to the plant that may occur and reduces the time that may be required when using the sensor feedback from the plant. See Specification, page 2, lines 16-21 and 26-31; and page 4, lines 27-32.

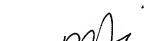
Regarding claims 3, 27, and 51, Pado also fails to disclose any details of the sensor feed back y(n) received from plant 12. Accordingly, Pado fails to disclose or suggest that "the control input signal comprises a sinusoidal wave which linearly increases in frequency over time."

For the foregoing reasons, claims 1, 3 23-25, 27, 47-49, 51, and 72 are allowable over Pado. Claims 2-22, 26-46, and 50-71 depend from claims 1, 25, and 49 respectively and are thus allowable over the cited references at least due to their dependencies on claims 1, 25, and 49 respectively.

CONCLUSION

Applicants respectfully submit pending claims 1-72 are now in condition for allowance. If there are any remaining matters that may be handled by telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Respectfully Submitted,

Dated: July 30, 2007 By: 

Rustan J. Hill
Lee & Hayes, PLLC
Reg. No. 37,331
(206) 315-4001 x113

60483
CUSTOMER NUMBER